REMARKS

This application has been reviewed carefully in view of the Office Action mailed April 23, 2003. In that Office Action, the drawings were objected to as allegedly failing to comply with 37 C.F.R. 1.84(n), (o), and (p)(5). Claims 5-6, 11-12 and 15-16 were rejected under 35 U.S.C. § 112, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Claims 1-2 and 13 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by the patent to Morioka et al., U.S. Patent No. 5,995,111. Claims 3-12 and 15-16 were rejected under 35 U.S.C. § 103(a), as being allegedly unpatentable over Morioka et al. in view of Yoneda, Publication No. JP406301794A.

Applicants note that claims 13 and 14 have now been amended to correct typographical errors. These amendments do not relate to patentability.

New claims 17-19 have been added to the application.

The objections and rejections are addressed as follows:

1. BRIEF DISCUSSION ON THE INVENTION

Before specifically addressing these issues, it will be helpful first to briefly summarize Applicants' invention. The invention resides in a game machine for use by a player. Like many game machines, the game machine includes a game program that displays a multitude of objects on a display screen in an animated fashion. The game machine also includes a CPU that calculates the objects' position in a 3-D world coordinate system, and renders 3-D perspective images of the objects on the display. The player uses an input device to attempt the completion of whatever goals the game presents.

Under the present invention, the player's input identifies one object (or object portion). The object is effectively treated as the player's focal point, and all other objects (and/or object portions) are blurred relative to the world coordinate system depth of the identified object. Thus, it appears that the player's eyes are operating in the world coordinate system, and focusing on the identified object.

The invention contemplates that the identification of the object can occur by the player simply looking at the object. To this end, the input device can include a sensor configured to sense the line of the player's sight, and thus the point (on the display) at which the player looks. Such a line-of-sight sensor is known in numerous industries, including the computer gaming industry, where it is frequently used in virtual reality type gaming.

2. OBJECTION TO THE DRAWINGS

Applicants have amended FIG. 1 to comply with cited C.F.R. sections. In particular, Applicants have added legends as required by the office, and have verified that conventional symbols are used for all elements. Additionally, Applicants have added a line-of-sight sensor, reference number 6, as disclosed and identified in the specification. No new matter has been added to the application with this amendment.

3. § 112 REJECTIONS

Claims 5-6, 11-12 and 15-16 were rejected under 35 U.S.C. § 112, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Applicants respectfully traverse the Examiner's assertion that a line-of-sight sensor is not described in the specification in such a way as to enable a person skilled in the art to make and/or use the invention.

As discussed above, the line-of-sight sensor is a sensor configured to sense the line of the player's sight, and thereby establish the point (on the display) at

which the player is looking. Such a line-of-sight sensor is known in numerous industries, including the computer gaming industry. Modern variations on such sensors are found in various virtual reality type games. Other variations are found in games such as shooting galleries, where users either look down a gun or use a target light on a gun to identify their line of sight. More importantly, the functioning of such a line-of-sight sensor is fully disclosed in the specification.

In particular, the specification recites:

> the line of sight of the player is tracked by means of the line-of-sight sensor. The "'specific portion' of the specific object" is determined relative to the position of the view point of the player on the monitor screen, which is evident from the result of detection made by the line-of-sight sensor. [see, page 5, lines 26-30, emphasis added]

Please note that this states that the sensor determines the point on the screen that the player is viewing.

Additionally, the specification recites:

> "the "specific portion" or "specific object" is determined "relative to" the position of the line of sight. As a matter of course, the position of view point of the player on the monitor screen that has been made evident from the result of the detection performed by the line-of-sight sensor may be taken as the "specific portion" or "specific object." [see, page 5, line 34 to page 6, line 3]

Thus, the application describes that the line-of-sight sensor detects the line of sight of a player who is viewing the display, and thereby determines the portion of the screen being viewed by the player. The application further identifies that this information is used to identify the selected object (or object portion).

Claim 5 recites that "the specific object or the specific portion of the specific object determined as being in focus is set by tracing the line of sight of the player through use of a line-of-sight sensor and on the basis of the position of the point of

view of the player on a monitor screen, which has been determined from the result of detection of the line-of-sight sensor." Claims 6, 11-12 and 15-16 include identical or similar recitations.

A person skilled in the art, having reviewed the specification (including the above-cited portions) would be able to use existing technology for sensing a player's line of sight on a screen to implement the invention. More particularly, a person skilled in the art would be able to program a game machine to identify a particular object or object portion on a display, based upon a player viewing a particular point on that display.

Therefore, the specification adequately describes a line-of-sight sensor in such a way as to enable a person skilled in the art to make and/or use the invention. Applicants respectfully request the Examiner to withdraw the § 112 rejections of claims 5-6, 11-12 and 15-16.

4. §§ 102 REJECTIONS

Claims 1-2 and 13 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by the patent to Morioka et al., U.S. Patent No. 5,995,111. Applicants appreciate the Examiner's past and present efforts in identifying art relevant to more accurately identifying Applicants' invention.

Morioka et al. relates to an image processing apparatus that includes a blur processor. Blurring is identified in Morioka et al. for expressing qualities like relative distance, motion, relative transparency, luminescence and heat.

a. Claims 1 and 2

Claim 1 has been amended to better claim the invention. In particular, claim 1 now recites that "the specific object or the specific portion thereof is playable by game players." Morioka et al. fails to disclose a specific object, which provides the

reference distance for focusing an entire display, the specific object being playable by game players.

Claim 2 depends from independent claim 1, adding features that further distinguish over the Morioka et al. patent. For these reasons, the rejection of claims 1 and 2 under § 102(e) is now improper. Applicants respectfully request the Examiner withdraw the rejections of claims 1 and 2.

b. Claim 13

Claim 13 recites the step of "determining, from the plurality of objects, a specific object or a specific portion thereof as being in focus according to operations performed by a player" Morioka et al. fails to disclose a specific object that provides the reference distance for focusing a display, and that is selected according to operations performed by a player.

For this reason, the rejection of claim 13 under § 102(e) is improper. Applicants respectfully request the Examiner withdraw the rejection of claim 13.

5. § 103(a) REJECTIONS

Claims 3-12 and 15-16 were rejected under 35 U.S.C. § 103(a), as being allegedly unpatentable over Morioka et al. in view of Yoneda, Publication No. JP406301794A.

Yoneda relates to a game machine in which a display means represents a three-dimensionally processed image representing a field of view, such as might be found in a flight simulator. The game machine identifies movement of the field of view, and defocuses the periphery of the moving field of view in response to the velocity of that movement. A visual field with high-picture quality is maintained inside the circumference of the visual field, with the defocusing occurring outside the periphery.

a. Designation of Art Citation With Particularity

"When a reference is complex ... the particular part relied on must be designated as nearly as practicable." [see, 37 C.F.R. 1.104(c)(2)] Yoneda identifies six separate examples of its described device. The Office Action does not identify any particular portion of Yoneda as allegedly disclosing the features of the present invention. Rather, the Office Action broadly alleges that Yoneda discloses a wide variety of features.

As discussed below, Applicants respectfully traverse the assertion that Yoneda discloses the asserted features. Furthermore, Applicants respectfully traverse the assertion that the present invention is obvious over Morioka et al. in view of the features asserted to be in Yoneda. Nevertheless, without a clear designation of the particular part of Yoneda relied upon for the various asserted features, Applicants lack a clear basis for response to the Office Action, and a clear record upon which to base an appeal (if one should become necessary).

Therefore, before any final action is given, Applicants respectfully request that the rejection of claims 3-12 and 15-16 be made with particularity. More particularly, Applicants request the designation of the particular part(s) of Yoneda relied upon for the various features recited in the Office Action.

b. The Prima Facie Case of Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references, when combined, must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination must be found in the prior art and not based on the Applicants' disclosure. (See, M.P.E.P. § 706.02(j)).

Applying the above requirements to the facts of the present application, the cited art fails to render the claims of the application obvious. In particular, Yoneda fails to suggest all the asserted claim limitations, and the cited art lacks a suggestion to modify Morioka et al. with the alleged teachings of Yoneda.

i. The Cited Art Fails to Suggest All the Claim Limitations

As discussed above, Yoneda relates to a game machine that identifies movement of the field of view, and defocuses the periphery of the moving field of view in response to the velocity of that movement. For example, a person using a flight simulator will experience blurring around the periphery of their view screen when the orientation of their aircraft (and thus their depicted view out of the aircraft) turns rapidly.

Amended claim 1, and therefore dependent claims 2-12 recite:

> a specific object or a specific portion thereof is brought into focus and the plurality of objects placed in the world space are blurred according to the depths thereof relative to the specific object determined as being in focus or the specific portion thereof determined as being in focus, wherein the specific object or the specific portion thereof is playable by game players.

Claims 13-16, the scope of which have not been amended, recite:

> determining, from the plurality of objects, a specific object or a specific portion thereof as being in focus according to operations performed by a player; and
>
> blurring other objects in such a way that the objects becomes more blurred with an increase in the depth thereof relative to the determined object or the specific portion of the determined object or another object as being in focus.

As an example of the difference between the alleged teachings of Yoneda and the claimed features of the present invention, consider a shooting game. Under the teachings of Yoneda, if players aim their guns at a target on the periphery of the display, no additional blurring would occur. However, when the view of the

display is moving rapidly from side to side, the center of the display stays focused while the periphery blurs. Under the claims of the present invention, when the players select a target on the periphery of the display (by aiming a gun at the target), then that target comes into focus, and all other objects are blurred according to their visual distance from the player (relative to the distance of the selected target). However, if the view of the display is moving rapidly from side to side, no change in the viewing occurs due to that movement.

Contrary to the suggestion in the Office Action, Yoneda fails to disclose a player choosing/playing a specific object (or object portion). Furthermore, Yoneda fails to disclose any relationship between a selected/determined object and a choice of focal depths.

ii. The cited art lacks a suggestion to modify Morioka et al. with the alleged teachings of Yoneda

As a motivation to combine the cited art, the Office Action asserts that a suggestion to modify Morioka et al. with the alleged teachings of Yoneda exists because "[t]o do so would provide game players with realistic imaging to a fast moving game like an air-to-air combat game."

Yoneda is directed toward giving a feeling of movement when the view depicted on a view screen moves at a high speed. However, the game or simulation of Morioka et al. is not identified as a game having a moving view, let alone a game having a rapidly moving view. Thus, Morioka et al. is not identified as being subject to the problem that Yoneda purports to solve.

Because Morioka et al. is not identified as being subject to the problem that Yoneda purports to solve, there is no suggestion to combine the references or modify Morioka et al. with the alleged teachings of Yoneda.

iii. The Office Action Failed to Establish a Prima Facie Case of Obviousness

Because the cited art fails to suggest all the claim limitations, and because the cited art lacks a suggestion to modify Morioka et al. with the alleged teachings of Yoneda, the office action fails to establish a prima facie case of obviousness. Applicants respectfully request the rejection of claims 3-12 and 15-16 under 35 U.S.C. § 103(a) be withdrawn.

6. CONDITIONAL REQUEST FOR INTERVIEW

In light of Applicants' amendments and arguments, Applicants believe that the claims are now in condition for allowance. Nevertheless, if the Examiner has issues that merit discussion, or if the Examiner believes that claims of the application should be finally rejected, then Applicants request a telephonic interview to efficiently resolve all open issues.

7. CONCLUSION

In view of the foregoing, a timely Notice of Allowance is requested in this case.

Respectfully submitted,
Hiraoka et al.

By: _____

John A. Griecci
Registration No. 39,694
For: The Law Office of John A. Griecci

703 Pier Avenue, Suite B #657
Hermosa Beach, CA 90254
(310) 376-6527